

## CLAIMS

We claim:

- 1           1.     A method comprising:
  - 2           applying an inverse wavelet transform to data repeatedly for a
  - 3     plurality of decomposition levels; and
  - 4           clipping, after each application of the inverse wavelet transform, any
  - 5     value generated as a result of application of the inverse wavelet transform
  - 6     that exceeds a predetermined range associated with that decomposition
  - 7     level subband of the inverse wavelet transform.
- 1           2.     The method defined in Claim 1 wherein the inverse wavelet
  - 2     transform comprises a 5,3 wavelet transform filter.
- 1           3.     The method defined in Claim 1 wherein the inverse wavelet
  - 2     transform comprises a 9,7 wavelet transform filter.

1           4.     An article of manufacture comprising one or more recordable  
2     media having executable instructions stored thereon which, when executed  
3     by a machine, cause the machine to:  
4             apply an inverse wavelet transform to data repeatedly for a plurality  
5     of decomposition levels; and  
6             clip, after each application of the inverse wavelet transform, any  
7     value generated as a result of application of the inverse wavelet transform  
8     that exceeds a predetermined range associated with that decomposition  
9     level, subband and inverse wavelet transform.

1           5.     The article of manufacture defined in Claim 4 wherein the  
2     inverse wavelet transform comprises a 5,3 wavelet transform filter.

1           6.     The article of manufacture defined in Claim 4 wherein the  
2     inverse wavelet transform comprises a 9,7 wavelet transform filter.

1           7.     An apparatus comprising:  
2             means for applying an inverse wavelet transform to data repeatedly  
3     for a plurality of decomposition levels; and

4 means for clipping, after each application of the inverse wavelet  
 5 transform, any value generated as a result of application of the inverse  
 6 wavelet transform that exceeds a predetermined range associated with that  
 7 decomposition level, subband and inverse wavelet transform.

1 8. The apparatus defined in Claim 7 wherein the inverse wavelet  
 2 transform comprises a 5,3 wavelet transform filter.

1 9. The apparatus defined in Claim 7 wherein the inverse wavelet  
 2 transform comprises a 9,7 wavelet transform filter.

1 10. A method comprising:  
 2 applying a forward wavelet transform to input data in a 4:x:x format  
 3 to generate encoded data, where x is not equal to 4; and  
 4 quantizing level 1 coefficients in high-low (HL) and high-high (HH)  
 5 subbands to zero, such that the encoded data resembles 4:4:4 formatted data.

1 11. The method defined in Claim 10 further comprising quantizing  
 2 level 1 coefficients in a low-high (LH) subband to zero.



1           17.    The apparatus defined in Claim 10 wherein the input data is  
2   4:2:2 formatted data.

1           18.    An article of manufacture comprising one or more recordable  
2   media having executable instructions stored thereon which, when executed  
3   by a machine, cause the machine to:  
4           apply a forward wavelet transform to input data in a 4:x:x format to  
5   generate encoded data, where x is not equal to 4; and  
6           quantize level 1 coefficients in high-low (HL) and high-high (HH)  
7   subbands to zero, such that the encoded data resembles 4:4:4 formatted data.

1           19.    The article of manufacture defined in Claim 18 further  
2   comprising quantizing level 1 coefficients in a low-high (LH) subband to  
3   zero.

1           20.    The article of manufacture defined in Claim 19 wherein the  
2   input data is 4:1:1 formatted data.

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